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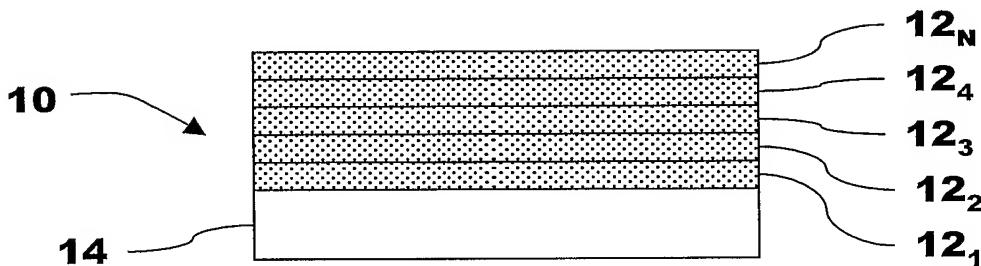
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(54) Title: OPTICALLY ENCODED PARTICLES, SYSTEM AND HIGH-THROUGHPUT SCREENING



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(57) Abstract: The invention concerns a particle (10, 10a) having a code from a library of codes embedded in its physical structure by refractive index changes between different regions of the particle. In preferred embodiments, a thin film possesses porosity that varies in a manner to produce a code detectable in the reflectivity spectrum. An assay detection method uses such a particle and detects a spectral shift in the presence of an analyte. Additional embodiments are disclosed including additional features.